

4760

93L/9W

GROUND MAGNETOMETER SURVEY

93L/9W on SAW Nos. 1-4 Claims
4 miles NE of Perow

Lat. $54^{\circ}34'N$, Long. $126^{\circ}24'W$.

by R.H. Beaton, P.Eng.

for Phelps Dodge Corporation of Canada, Ltd.

November 28, 1973

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. 4760	MAP

REPORT on the GROUND MAGNETOMETER SURVEY

on

SAW Mineral Claims Nos. 1-4

for

PHELPS DODGE CORPORATION OF CANADA, LIMITED

by

R. H. Beaton, P.Eng.

November 28, 1973

Saw Claim Group, Perow, B.C.

Omineca Mining Division, B.C.

$54^{\circ}34'N$, $126^{\circ}24'W$

Dates of Survey ~ Sept. 24-25, Oct. 20, 1973.

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MAPS AND DIAGRAMS

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Introduction:

On September 24 to 25, and on October 20, 1973, a ground magnetometer survey was carried out by Phelps Dodge Corporation of Canada, Limited, on its Saw No.1 Group of mineral claims northeast of Perow, B.C. Purpose was to determine suitability of employing ground magnetics in determining lithologic trends in the vicinity of the old Jack Rabbit gold-silver-copper prospect where bedrock was largely concealed by overburden. Four miles of line were blazed or flagged using the location line as baseline. Stations were chained at 100-foot intervals except in the vicinity of the old showings where a 50-foot interval was employed. Spacing of lines was 400 feet except where short fill-in lines at 100-foot spacing were employed immediately north and south of the showings.

Survey Method and Instrument:

A hand-held magnetometer (Sharpe MF-1 fluxgate) was employed to obtain readings. The instrument, harness slung, was oriented north at moment of observation. Readings, recorded directly in gammas, reflected the vertical component of the earth's magnetic field.

Procedure employed was the normal "looping" method necessitated by a single instrument. Datum of 500 gammas was set at a reference point approximately 50 feet southwest of Initial Posts Saw Nos. 1-4 claims. On the base line, "looping" was done at every fourth station, i.e. 400 feet, but on cross lines no adjustments were made until return to the base line after completion of each.

Recording, Adjustment, and Presentation of Data:

Readings and watch times were recorded in a notebook together with station numbers and terrain notes. Direct readings were adjusted in the normal manner on a time basis; but corrections were minor. No unusual magnetic disturbances were noted during the course of the work. Adjusted values were plotted on a map of scale 1 inch equals 200 feet (showing the area surveyed, Saw Nos. 1-4 claims). This, together with a map of similar scale showing interpretation, is enclosed in a pocket accompanying the report.

Interpretation:

Readings varied from a low of 10 gammas at station 4+00 east on line 2+00 north; to a high of 1230 gammas at station 1+50 east on line 2+00 south to give a total magnetic relief of 1220 gammas in the survey area. Magnetic contours show a definite northerly trend which may reflect bedding in the underlying Hazelton volcanics. Bedding was observed in dark grey argillite exposed in the "S" bend of the west fork of Johnny David Creek, west of the surveyed grid.

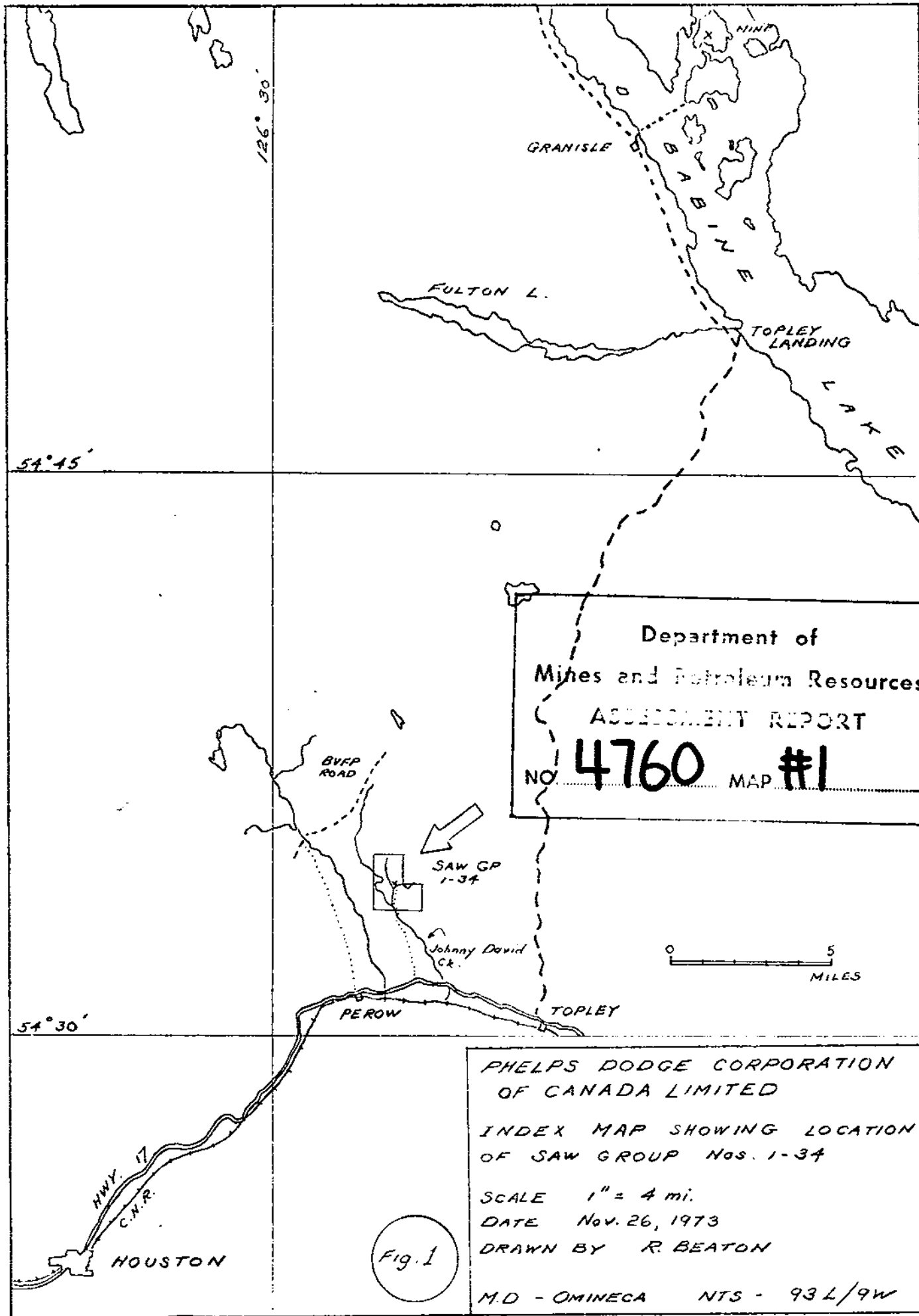


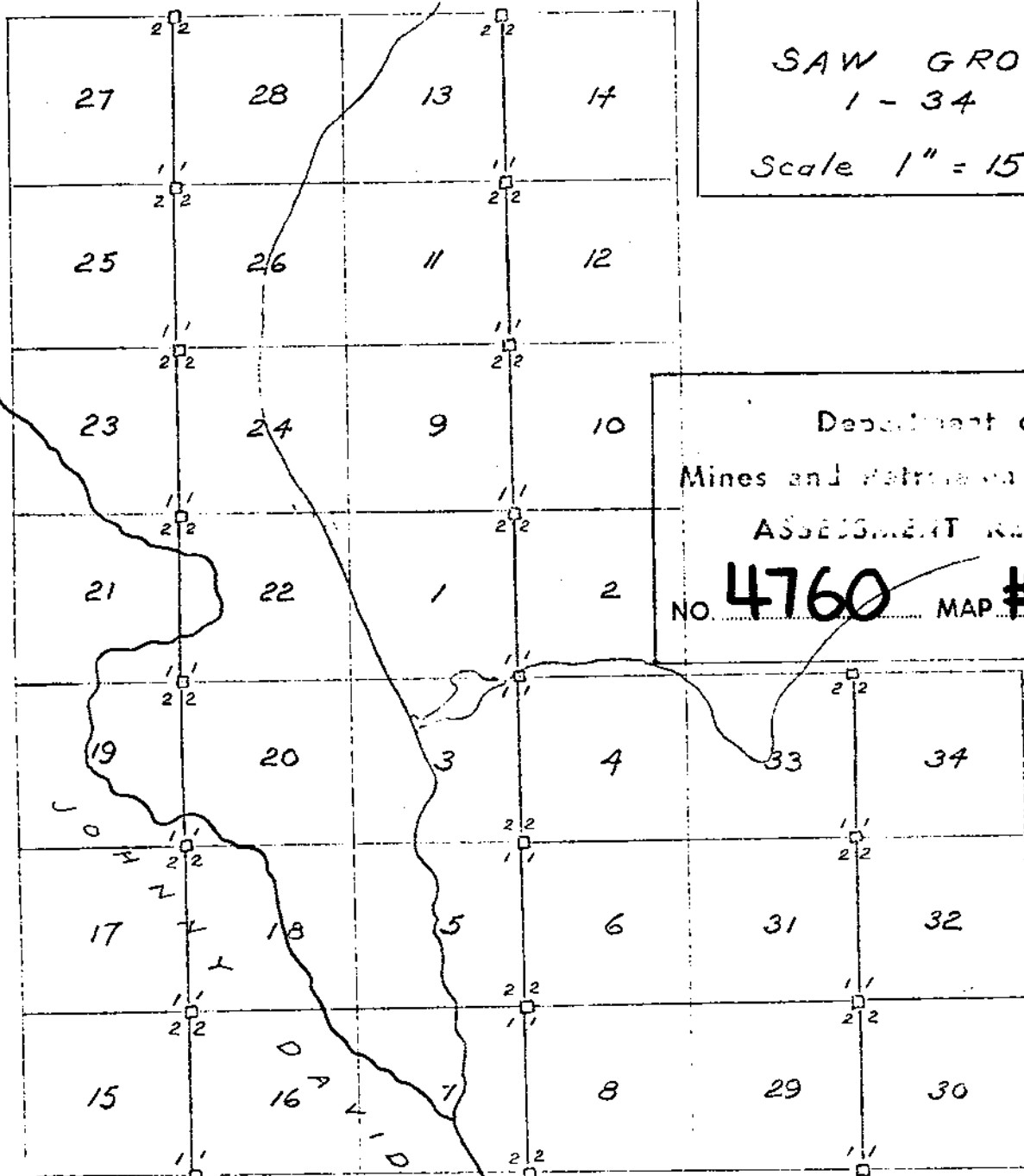
Fig. 1

TOPLEY MAP SHEET
93 L / 9' W 1/2

PHILIPS DODGE CORP
of CANADA LIMITED.

SAW GROUP
1 - 34

Scale 1" = 1500



Department of
Mines and Metallurgical Resources
ASSESSMENT REPORT
NO. **4760** MAP #2

Arrow
2 1/2 miles

Drawn Oct 3/73
Revised Nov 5/73
R.H. Beaton

Fig. 2

In the vicinity of the Jack Rabbit showings anomalous readings were obtained forming a broken pattern of restricted highs dissected by narrow lows. The old adit at the property was driven to follow a southeast-trending mineralized fault which coincides with a narrow low. A northeast-trending low which intersects the former at the adit portal is therefore believed to be a fault also; but unfortunately field evidence is lacking due to concealment by stream fill.

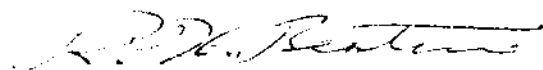
The restricted highs are probably caused in part by a local increase in magnetite in the epidotized andesitic to basaltic volcanics (flows?) exposed by creek erosion or cat trenching. A weakly mineralized NNW-trending quartz feldspar porphyry dyke some 90 feet thick just east of the adit fault is believed to have lower susceptibility than the volcanics. The restricted or spot highs which appear to overlie this dyke may be in fact related to the contacts rather than the dyke itself.

There are, in addition to the foregoing, two additional trends which may be associated with the "Jack Rabbit" mineralization. One trends northerly as a rather broad (500 feet \pm) expression of some two to three hundred gammas relief. The other, southerly through station 2+00E on line 8+00 south as a narrow but persistent moderate high of one to two hundred gammas relief. Since no outcrop is available for examination along these trends, their cause is conjectural. The trends are parallel to inferred bedding as previously discussed, but since mineralization is associated with the Jack Rabbit fault and dyke, there would appear to be justification for follow-up work, particularly since the trends appear to stem from the mineralized showings.

The broader trend, just mentioned, is represented on Aeromagnetic Series Map Sheet 93 L/9 (Geophysical Paper 5312, Topley) as a north-trending elliptical high of 100 gammas relief over a length of approximately 1 mile.

Conclusions & Recommendations:

From preliminary work done on Saw claims Nos. 1-4, it is believed that magnetics may be useful in defining lithologic trends which in turn may have possible bearing on the presence of economic mineralization. Accordingly it is recommended that the Saw claims be further investigated by continuing the ground magnetic survey to include the remaining 30 claims. It is also recommended that a reconnaissance Induced Potential survey be considered as a follow-up with coverage based on results of the magnetic work. Any target arising from these surveys might best be investigated initially by utilization of a percussion drill.



R. H. Beaton, P.Eng.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

In the Matter of

I, R. H. BEATON
of 404-1112 West Pender Street, Vancouver 1,

in the Province of British Columbia, do solemnly declare that the following are the details of costs incurred in carrying out a magnetometer survey on the Saw Nos. 1-4 claims for Phelps Dodge Corporation of Canada, Limited during September and October 1973.

Statement of Costs:

Personnel:

R.H. Beaton, geologist - 3 days
P.M. Smith, geologist - 2 days

Costs:

Personnel	5 man days @ \$50.00	\$250.00
Room & Board	7 man days @ \$20.00	\$140.00
Transportation	4-wheel drive - 5 days @ \$25.00	\$125.00
Report and Maps	6 man days @ \$50.00	\$300.00
		<hr/>
	TOTAL	\$815.00
		<hr/>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 11th
day of December, 1973, A.D.



Jean Paul Sub-mining Recorder
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

In the Matter of

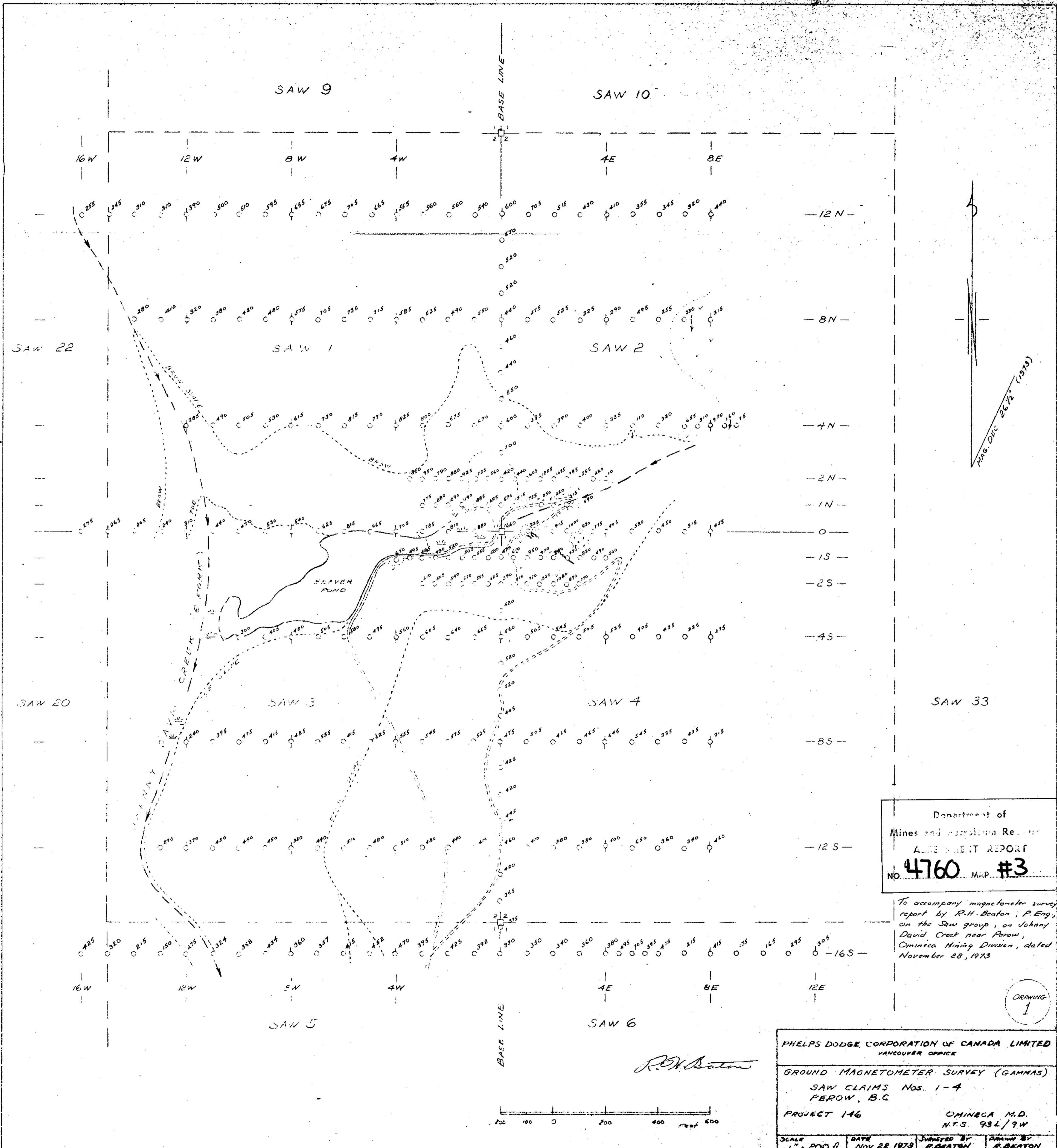
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Statutory Declaration
(CANADA EVIDENCE ACT)



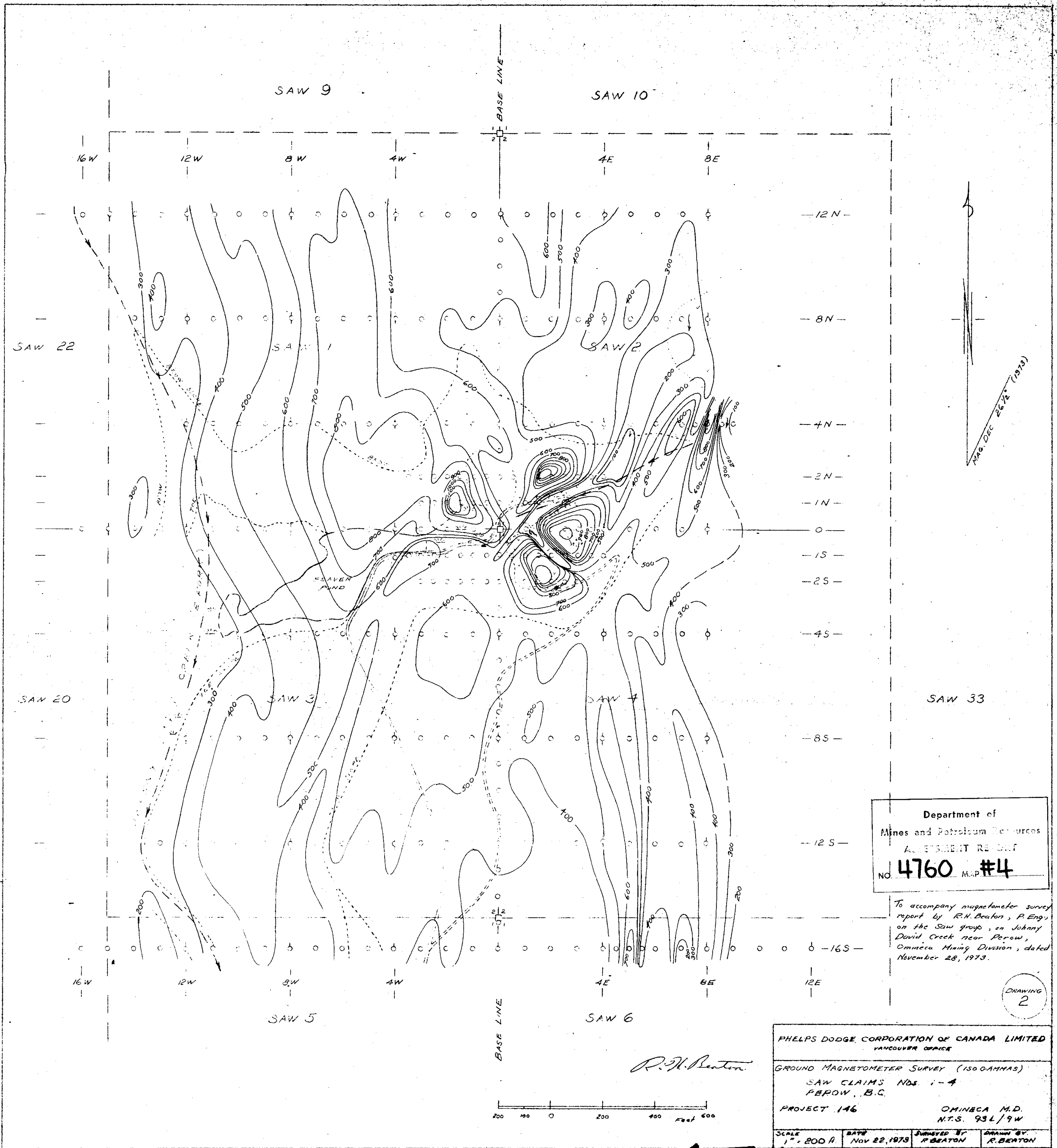
Department of
Mines and Geosciences Re. ...
ADJUMENT REPORT
NO. **4760** MAP #**3**

To accompany magnetometer survey
report by R.H. Beaton, P. Eng.,
on the Saw group, on Johnny
David Creek near Perow,
Omineca Mining Division,
dated November 28, 1973

DRAWING
1

PHELPS DODGE CORPORATION OF CANADA LIMITED
VANCOUVER OFFICE
GROUND MAGNETOMETER SURVEY (GAMMAS)
SAW CLAIMS Nos. 1-4
PEROW, B.C.
PROJECT 146
OMINECA M.D.
N.T.S. 93L/9W
SCALE 1" = 200 FT. DATE NOV 22, 1973 SURVEYED BY R. BEATON DRAWN BY R. BEATON

4760-M3



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **4760** MAP **#4**

To accompany magnetometer survey report by R.H. Beaton, P. Eng., on the Saw group, on Johnny David Creek near Perow, Cominca Mining Division, dated November 28, 1973.

DRAWING
2

PHELPS DODGE CORPORATION OF CANADA LIMITED
VANCOUVER OFFICE
GROUND MAGNETOMETER SURVEY (150 GAMMAS)
SAW CLAIMS NOS. 1-4
PEROW, B.C.
PROJECT 146
COMINCA M.D.
N.T.S. 93L/9W
SCALE 1" = 200 FT. DATE Nov 22, 1973 SURVEYED BY P. BEATON DRAWN BY R. BEATON

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